# ASTER Update

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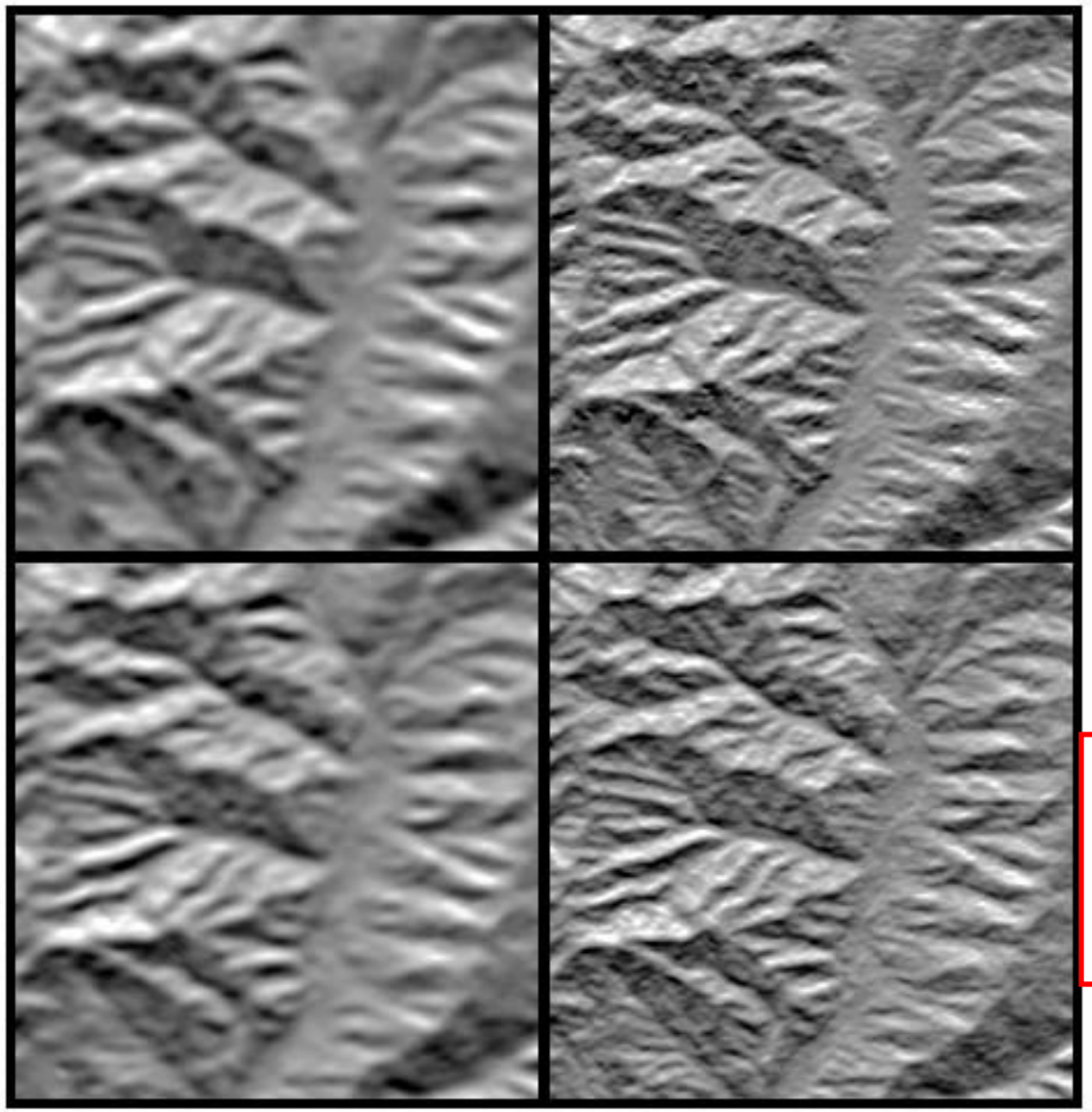
# ASTER Global Digital Elevation Model (GDEM)

- GDEM Released June 2009
- Over ***10,000,000*** tiles have been downloaded in first year
- ~500,000/month steady download rate now
- GDEM Version 2:
  - Production of 1,700,000 individual scene DEMs commenced
  - Contract and money in place
  - Delivery for validation expected Spring 2011
  - Release to public in Summer/Fall 2011
  - Improvements: 2x improvement in resolution; water body flattening; 30m water mask; additional 200,000 scenes to fill holes

# Version 2 ASTER Global DEM



SRTM
3 ArcSec

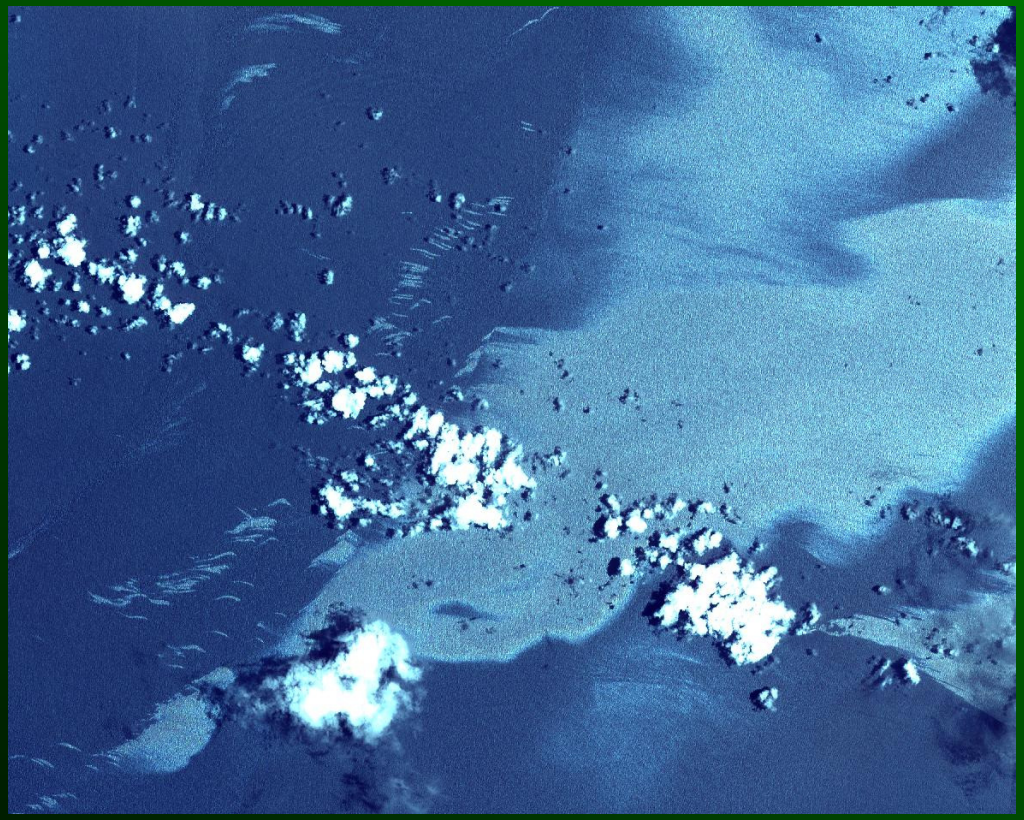
SRTM
1 ArcSec

GDEM
9x9 kernel
Currently
Available

GDEM
5x5 kernel
for
Version 2

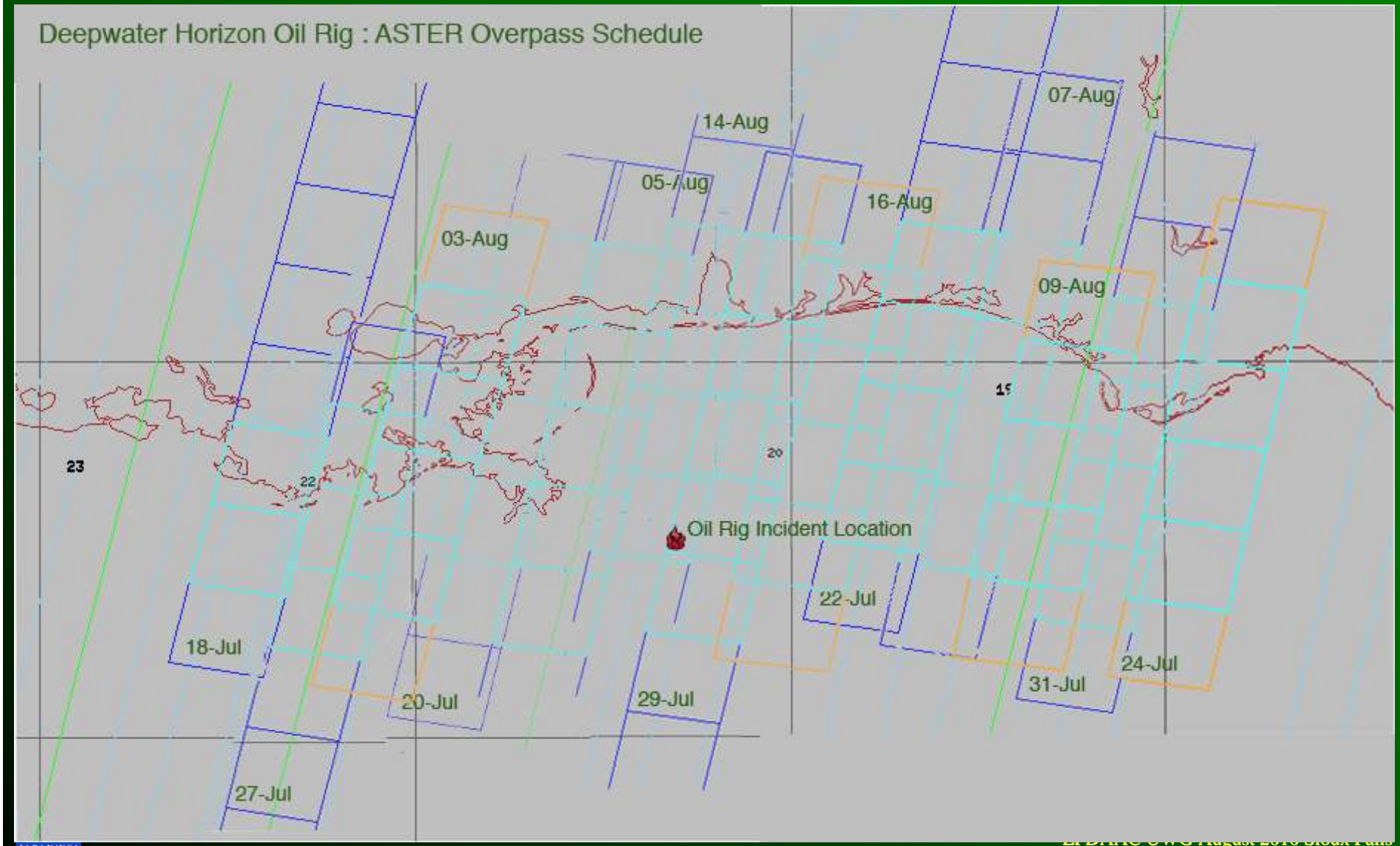
# Gulf Oil Spill Acquisitions

May 1 2 3 4 5 6 7 8 9 **10** 11 12 13 14 **15** 16 **17** 18 19 20 21 22 23 **24** 25 **26** 27 28 29 30 31
June 1 2 3 4 5 6 7 8 **9** 10 **11** 12 13 14 15 16 17 18 19 20 21 22 23 24 **25** 26 **27** 28 **29** 30
July 1 2 3 **4** 5 **6** 7 **8** 9 10 11 12 **13** 14 **15** 16 17 **18** 19 20 21 **22** 23 **24** 25 26 **27** 28 **29** 30 **31**
Aug 1 2 **3** 4 **5** 6 **7** 8 **9** 10



July 15 image near well location

# Gulf Oil Spill Acquisition Schedule for 18 July to 16 August



# Eyjafjallajökull Iceland Volcano Eruption

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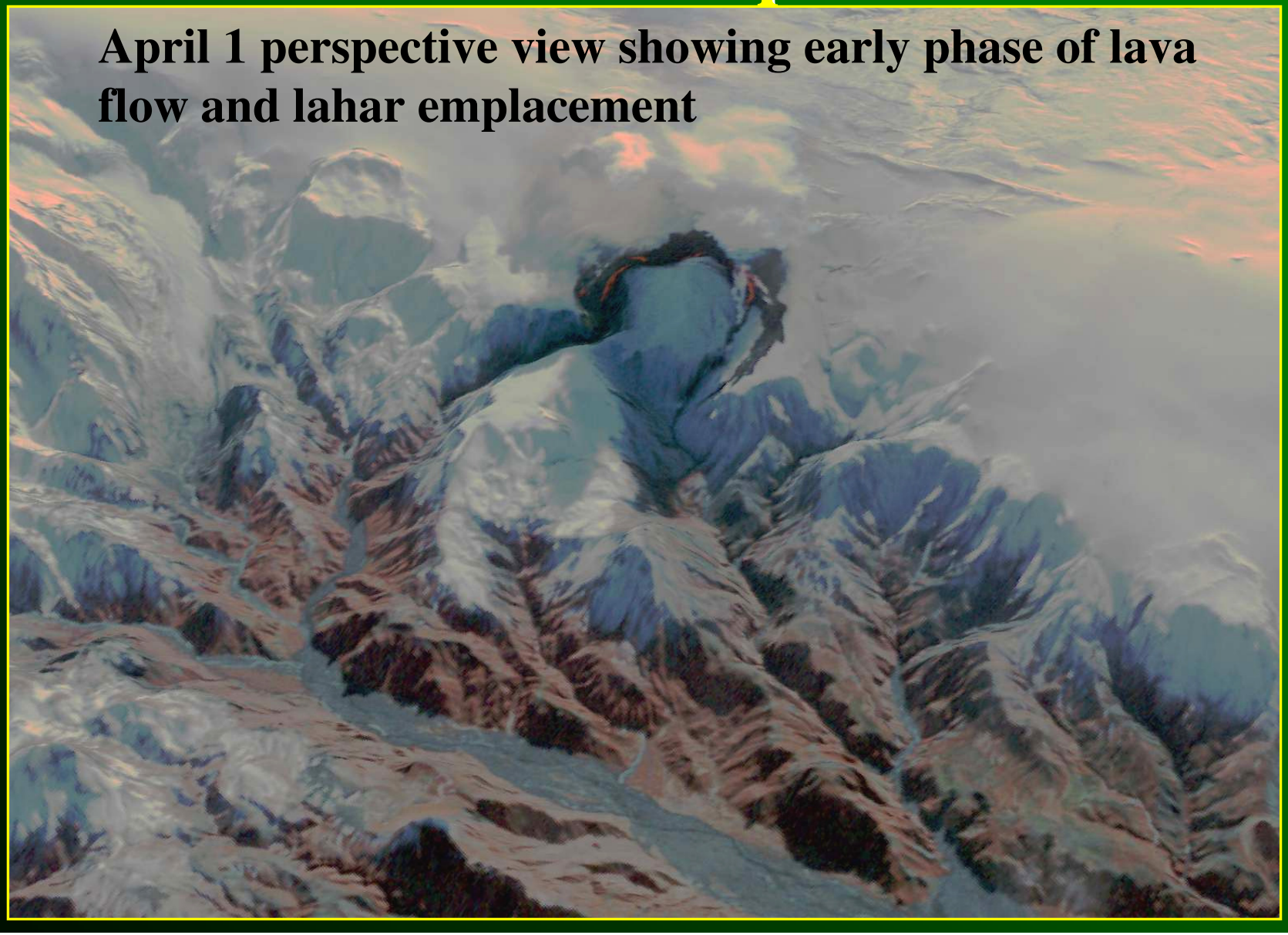
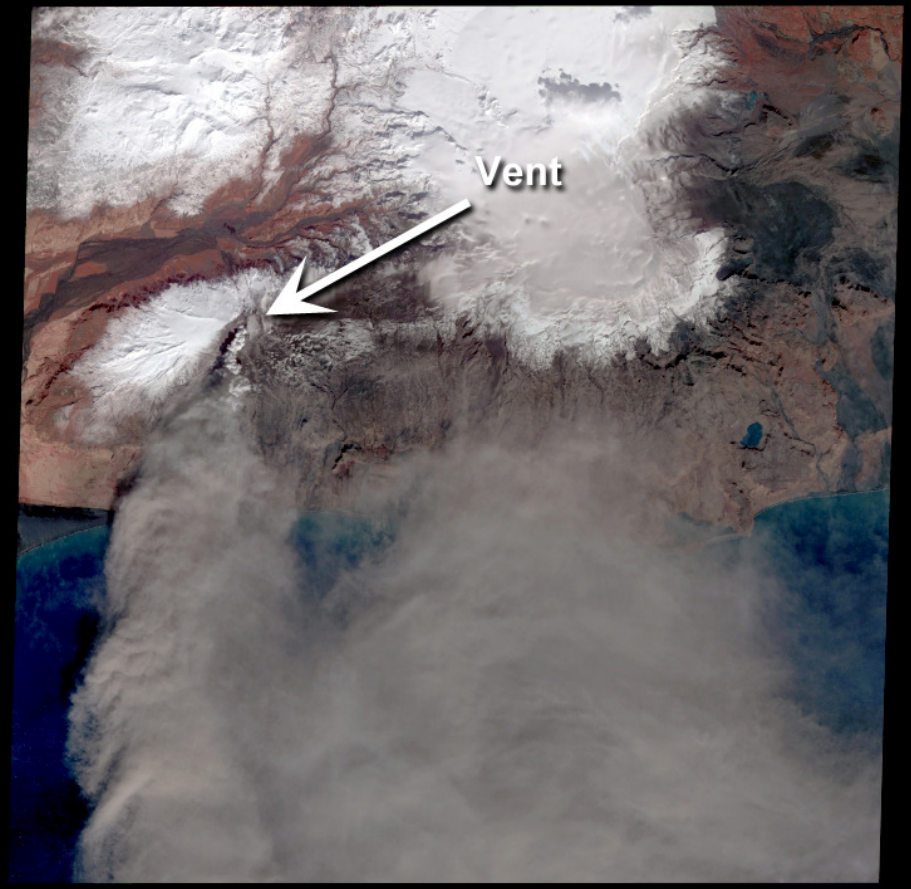
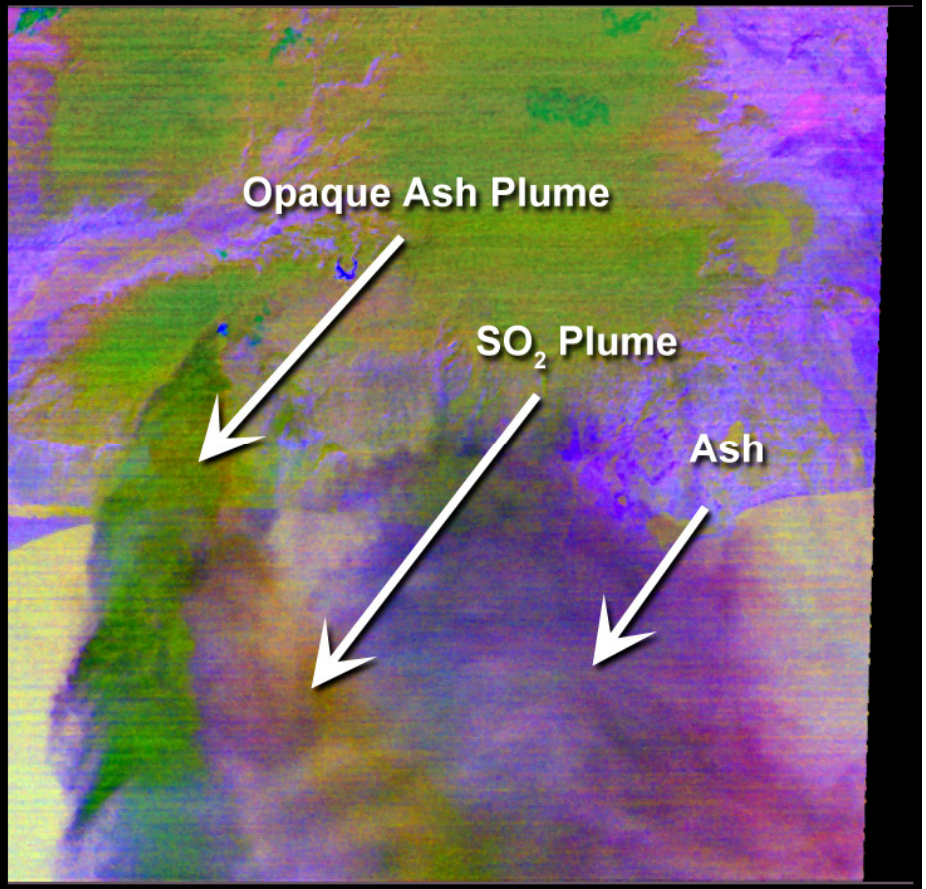


April 1 perspective view showing early phase of lava flow and lahar emplacement

# ASTER Observations of the Eyjafjallajökull Eruption
## 19 April 2010 - 12:51 UTC




Visible - Near Infrared




Thermal Infrared

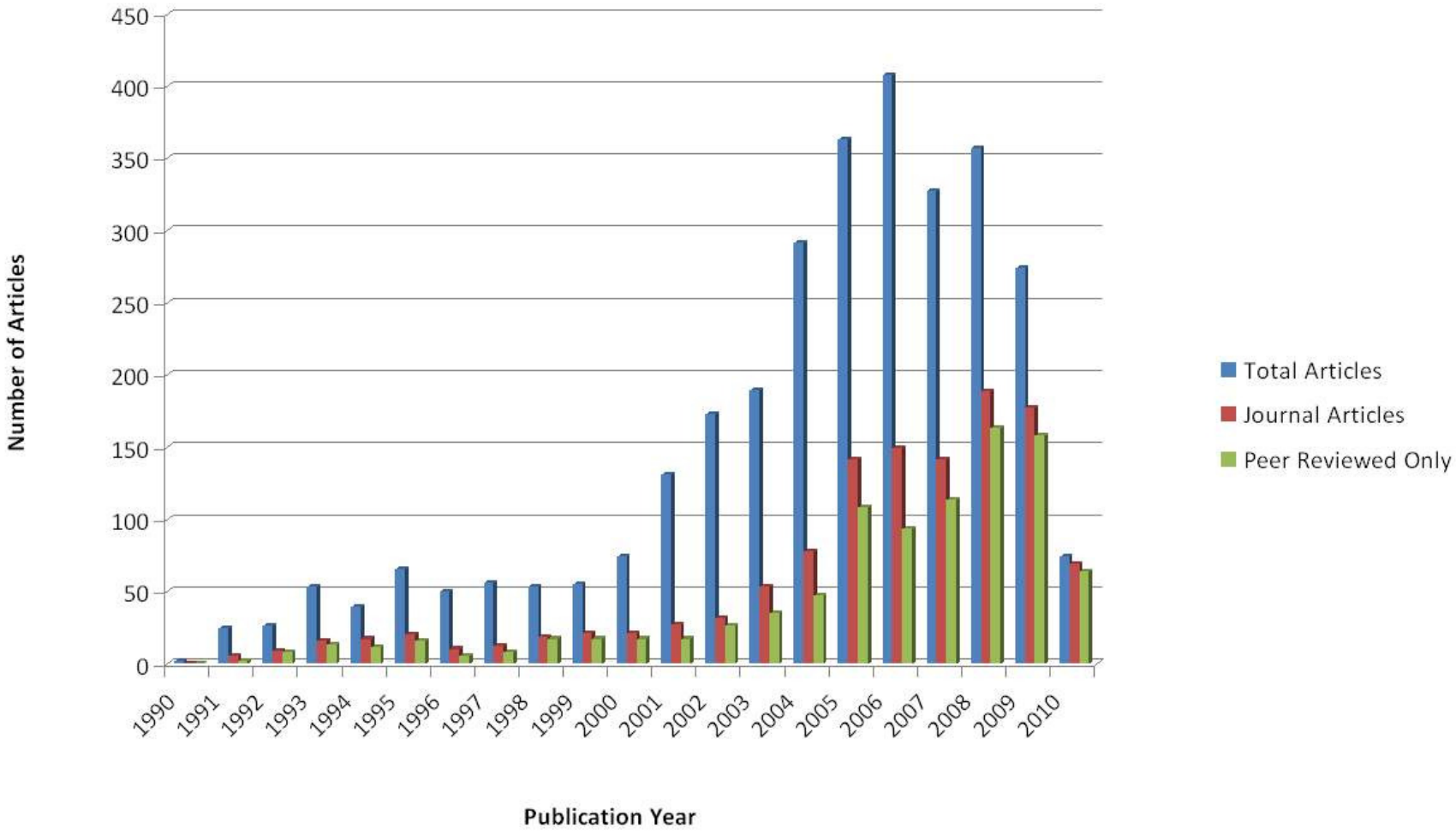
kilometers

0 36

# ASTER Peer Reviewed Articles

May 2010

Compiled by Ann Coppin, JPL Library



# ASTER Long Term Archive

Position 1
Archive all existing data (Level_1A) and maintain product generation system for Level_1b and higher level products (AST_05, AST_07, AST_09 etc). The problem with this position will be maintaining the code to generate Level_1B and higher level data products. High cost

Position 2
At the end of the mission (i.e. when the instrument dies) generate Level_1B and higher level products from the Level_1A archive and archive all the products. Medium cost

Position 3
Just archive the Level_1A and ability to generate the Level_1B and documents for generating the higher level data products. Again the problem will be maintaining the L1A to L1B code. Low cost

Position 4
Just archive the Level_1B data. The problem with this approach is if we want to go back and recalibrate for any particular reason it will be difficult, if not impossible, since the radiometric and geometric coefficients will have been applied. Low cost

# ASTER Science Team Recommendation

- Position 2: At end of mission, generate L1B and higher products from L1A and archive all products.
  - Products themselves (or subset as agreed upon)
    - Also user documentation, compliant metadata.
  - Reproducibility? If so:
    - ATBDs
    - PGEs/source code
    - Relevant ancillary info (calibration, atmospheric correction, geo-location, etc.)
    - Any interagency or intergovernmental agreements necessary to distribute the above